MULTIMEDIA UNIVERSITY STUDENT IDENTIFICATION NO

MULTIMEDIA UNIVERSITY

FINAL EXAMINATION

TRIMESTER 1, 2017/2018

BBF 2154 – INVESTMENT

(All sections / Groups)

27 OCTOBER 2017
3:00 p.m – 5:00 p.m
(2 Hours)

INSTRUCTIONS TO STUDENT

1. This Question paper consists of 4 pages with 4 Questions only.
2. Answer **ALL** questions. All questions carry equal marks and the distribution of the marks for each question is given.
3. Students are allowed to use non-programmable scientific and financial calculators.
4. Please write all your answers in the Answer Booklet provided.

QUESTION 1

(a) HOMESOY Corporation anticipates the need to purchase 70,000 bushels of soybeans in six months to use in their products. The current cash price for soybeans is RM5.50 a bushel. A six-month futures contract for soybeans can be purchased at RM5.60.

(i) Discuss why the company might need to purchase futures contracts to hedge their position.

(2 marks)

(ii) To completely hedge their exposure, how many contracts will they need to purchase? Soybeans trade in 5,000-bushel contracts.

(2 marks)

(iii) If the cash price of soybeans ends up at RM5.75 per bushel after six months, by how much will the actual cost of 70,000 bushels of soybeans have gone up?

(3 marks)

(iv) After the futures contracts are closed out (sold at RM5.75), what will be the gain on the futures contracts?

(3 marks)

(v) What is the overall gain or loss considering the answer in part (iii) and part (iv)?

(3 marks)

(b) NEW IMAGE foresees a non-constant growth pattern for dividends.

- Dividends at the end of year 1 are RM4.00 per share and are expected to grow by 10% per year until the end of year 4.
- After year 4, dividends are expected to grow at 6%.
- All dividends are to be discounted back to present at a 12% rate.

(i) Estimate the dividend for year 2 until year 4.

(3 marks)

(ii) Find the NPV for all dividends from year 1 until year 4.

(3 marks)

(iii) Find the value of dividend from the fifth year onwards.

(2 marks)

(iv) Find the present value of year 4 stock price.

(2 marks)

(v) What is the total present value of stock?

(2 marks)

(Total: 25 marks)

Continued ...

QUESTION 2

(a) Key indicator series is one of the tools of technical analysis to estimate the future market movement. Technical indicator series may be detected for bearish and bullish trends. Some investors try to track the pattern of sophisticated traders in the belief that they might provide a better investment outcome or extraordinary insight into the future. Examine **TWO (2)** ways under the "smart money rules".

(8 marks)

(b) Industries experience a similar cycle of life. The stages are the same for all industries, yet every industry will experience these stages differently. They will last longer for some stages and pass quickly for the others. The industry life cycle is a concept relating to the different stages that the industry will go through, from the first product entrance to its ultimate decline.
Discuss **FIVE (5)** stages of the industry life cycle and the pattern of dividend payment over the cycle.

(10 marks)

(c) AYDEN has invested in a bond and the details are:

- 10% coupon interest
- Par value of the bond is RM1,000.00
- The bond price is RM1,300.00
- 10 years to maturity.

(i) Calculate the yield to maturity (YTM) of this bond, using semi-annual compounding.

(3 marks)

(ii) Calculate the yield to call (YTC) of this bond, using semi-annual compounding, if the call of the bond can be made in 5 years at a price of RM1,050.00.

(4 marks)

(Total: 25 marks)

Continued ...

QUESTION 3

(a) Braydon is working in Malacca Securities firm. His boss has collected some figures and he is assigned to do some calculations. These are the details:

- risk-free rate (R_F) = 8%,
- market rate of return (K_M) = 12%,
- market standard deviation (σ_M) = 10%
- standard deviation of the portfolio (σ_P) = 12%.

(i) Based on the capital market line, calculate the expected value of portfolio (K_P).

(5 marks)

(ii) Assume the portfolio standard deviation (σ_P) has increased to 16%. Calculate the expected value of portfolio (K_P).

(5 marks)

(iii) Compare the answer in part (i) and part (ii). In terms of the capital market theory, explain why the expected value of portfolio (K_P) has increased or decreased.

(5 marks)

(b) Risk involves the chance an investment's actual return will differ from the expected return. Risk includes the possibility of losing some or all of the original investment. Different versions of risk are usually measured by calculating the standard deviation of the historical returns or average returns of a specific investment.
Compare and contrast the **TWO (2)** types of risk by constructing a table.

(10 marks)

(Total: 25 marks)

Continued ...

QUESTION 4

(a) A portfolio is designed according to the investor's risk tolerance, the time frame and investment objectives. An investment portfolio represents a variety of asset classes and types of investments to achieve an appropriate risk-return portfolio allocation. Below is a portfolio consisting of the following stocks:

Stock	Investment Amount	Beta	Expected return
Diamond	RM40,000	1.80	25%
Sapphire	RM32,000	1.30	20%
Ruby	RM60,000	0.80	11%
Jade	RM43,000	1.05	13%

The Treasury bill rate is 3% and the expected return on the market portfolio is 6%.

(i) What is the expected return of the portfolio?

(5 marks)

(ii) Calculate the beta of the portfolio.

(5 marks)

(iii) Calculate the required rate of return.

(3 marks)

(b) Over the past 50 years, the efficient market hypothesis (EMH) is the subject of rigorous academic research and an intense debate. It has preceded finance and economics as the fundamental theory explaining movements in asset prices. The efficient market hypothesis (EMH) is an investment theory that states it is impossible to "beat the market" because the stock market efficiency causes existing share prices to always incorporate and reflect all relevant information.
Discuss the **THREE (3)** types of efficient market hypothesis.

(12 marks)

(Total: 25 marks)

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